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## Abstract

A base transceiver station for a radio communication system comprises a  
5 transmitter unit (TU), a receiver unit (RU) and a transmit path between the  
transmitter unit (TU) and an antenna . The receiver unit (RU) determines output  
data from received signals and the transmitter unit (TU) converts input data into  
transmitted signals and pre-distorts the transmitted signals using at least one  
compensation value. The base transceiver station comprises also a branching  
10 unit for transferring at least a portion of a transmitted signal from the transmit  
path to the receiver unit (RU) and a processing unit (PU) which is adapted to  
receive a representation of the input data and the output data. The processing  
unit (PU) compares the input data to the output data, determines a first  
compensation value for the pre-distortion according to the comparison and  
15 updates the compensation value of the transmitter unit (TU) with the first  
compensation value. Methods and computer programs embodying the invention  
are also described.